

THE PROPOSED NETWORK RAIL (SUFFOLK LEVEL CROSSING REDUCTION) ORDER

Network Rail response to the queries raised on the DIAs completed for the Suffolk Order

1. Prior to the application for the proposed Suffolk Order on 24 March 2017, Diversity Impact Assessments (DIAs) for crossings S20 Beecroft, S21 Abbots, S22 Weatherby and S69 Bacton were prepared by Sophie Elliott and Tracy Johnston of Mott MacDonald. All reports were overseen by Dr James Beard, Technical Specialist in Economic and Social Development. James has ten years' experience in this field and has undertaken and overseen more than 50 Network Rail DIAs, as well dozens of equivalent studies (referred to as Equality Impact Assessments – EqlAs) for Highways England, HS2 Ltd., and local transport authorities. He engaged with the Mott MacDonald engineering team to prepare and draft all of the DIAs that were provided to NR.
2. These 4 draft DIAs were provided to NR on 22 December 2016. These versions were reviewed by the Designated Project Engineer, Mr Kenning, the NR designated 'DIA Superuser' and Liability Negotiations Manager, Mr Day, and the project sponsor, Mr Eddy of NR. The NR review process was undertaken by those members of the project team that had detailed knowledge of the scheme. The NR review was limited to identifying factual or typographical errors in the DIAs and obtaining further clarifications on the recommendations of the external consultants who had undertaken the DIAs. Comments were sent back to Mott MacDonald for consideration in early January and updated DIAs were received from Mott MacDonald on 19 January 2017. A further revision of the DIAs was issued to NR on 21 April 2017.
3. The date of issue of each revision of the DIA documents is set out below:

DIA documents	Issued to Network Rail
Rev A	22/12/16
Rev B	19/01/17
Rev C	21/04/17

4. Following further work undertaken during 2017, it was identified that DIAs for crossings S16 Gislingham and S24 Higham Ground Frame should also be undertaken. These 2 further DIAs were prepared by Mott MacDonald and drafts were provided to NR on 16 June 2017.
5. A separate DIA was produced by Network Rail Safety, Technical and Engineering (STE) team for S25 Cattishall, where the existence of 2 projects (the Suffolk Order proposal to divert the public footpath to the underbridge with an upgrade to bridleway, and a separate but related developer-funded project to provide a footbridge at the site of the level crossing) required a DIA to take account of all the relevant issues.
6. All of these DIAs are live documents that NR continues to review and update when new information comes to light. The documents are not legally mandated, but are used by NR to assist in demonstrating that NR has had due regard to the matters it is required to consider pursuant to its public sector equality duty. If at any point these DIAs had highlighted a significant issue that NR did not consider could be appropriately mitigated or dealt with then the proposals in respect of that level crossing would have been removed from the draft

Suffolk Order. As explained in the DIAs, and the Statement of Case, because the level crossings included in this project require users to make their own decisions about whether it is safe to cross the line based on visual and/or aural information, they are considered to be inherently discriminatory against some users.

7. The official sign-off of all the DIAs by NR was provided post-Order deposition. As the NR designated DIA Superuser, Mr Day's role is to proof-read the DIAs and pick up any errors with reference to the railway, but he made no amendments that affected the conclusions and recommendations reached. The other NR sign-off, from a NR Senior Manager, did not identify any changes in the content of the DIAs being required.
8. The reference to Diversity Impact Assessments in the 2015 Route Requirements Document,¹ and the overarching Equality and Diversity Overview report clearly demonstrate that NR has been alive to the need to comply with its Public Sector Equality Duty throughout the process of developing closure proposals for the level crossings included within the project, and has in fact done so.

Weatherby DIA

9. The inspector raised a query about when the DIA for S22 Weatherby² was carried out with specific reference to the Equality and Diversity Overview report.³ Revision A of the Equality and Diversity Overview report is dated 22/02/2017 and at paragraph 4.3 on page 33 it is stated that S22 Weatherby has already been subject to a DIA. As set out in paragraph 1 of this note, the DIA for Weatherby was commissioned prior to the application for the Suffolk Order being made, and versions were issued to NR on the dates set in paragraph 3 (Rev A and Rev B pre-dating the application for the Order).
10. NR wishes to clarify that in the DIA for S22, the reference to an 'underpass'⁴ refers to a section of the route that 'passes under' the railway line. It is acknowledged that the terminology used reflects common parlance rather than the most precise technical language. In this particular location, the pedestrian route is on a footway on a public road that crosses the railway via an underbridge.
11. Under the heading 'Step 3: Impact' on pages 10 and 11 of the DIA for S22 Weatherby it is stated that *"The Department for Transport (DfT) states that underpasses should be as wide as possible to give sufficient room for disabled users, and ensure a sense of security"* but the specific DfT document that the guidance comes from is not set out. NR confirms that the guidance quoted is from section 8.4.6 of 'Inclusive Mobility' published by the Department for Transport. The full extract is set out below:-

¹ Andrew Kenning's Appendices Tab 1 (NR30/2) Section 2.2 (internal page 7/71)

² Appendix C to Susan Tilbrook's Rebuttal Proof for S22 Weatherby (NR/32/4/6)

³ Tab L to Susan Tilbrook's Supplementary Appendices (NR-INQ-16)

⁴ See eg internal page 4 of the DIA for S22 Weatherby

8.4.6 Footbridges, tunnels and underpasses

While it is preferable to have at grade crossings wherever it is safe and feasible, there are places where a bridge or underpass has to be provided.

The design of road- and rail-related footbridges, tunnels and underpasses is largely governed by the good practice standards on stairs, ramps and handrails given earlier in this Section.

It is worth remembering that the headroom to be accommodated on an underpass is usually less than that required for a footbridge, so the length of ramp and stairway will also be less.

Where underpasses are provided the approach to them should be as wide as possible to give an open aspect and sense of security. It is recommended that the width of the underpass itself should be at least **4.8 metres** and have a clear headroom of **3 metres**. Within the underpass, handrails set at **1000mm** above the walking surface should be provided on both sides. There should be a clear view from one end to the other and a good level of lighting, at least **50 lux**. CCTV cameras placed in tunnels will enhance security and should be located so as to provide full coverage. Notices to the effect that CCTV is in operation should deter vandals and provide a measure of comfort to pedestrians.

12. Reference was made during Ms Tilbrook's evidence to the guidance given in TD36/93 Subways for Pedestrians and Pedal Cyclists,⁵ but as stated above and during evidence, this location is not a subway only for the use of non-motorised users (NMUs) but is a highway that passes under a railway underbridge and therefore provides a wider section through the structure than stated in the Inclusive Mobility guidance. It is therefore considered that the overall dimensions of the underpass meet the guidance from Inclusive Mobility. The assessment of the route has also shown that the footway width through the underpass meets the generally acceptable parameters for wheelchair users and a pedestrian to pass one another (1500mm) as set out in section 2.2 of Inclusive Mobility.

⁵ Tab E of Susan Tilbrook's Supplementary Appendices (NR-INQ-15)

a swift response. There should also be an external communication system on all lift landings to enable communication with a central controller should a lift not be in service.

Passenger lifts that are provided to evacuate disabled people in an emergency must have an independent power supply and meet the relevant recommendations of BS 5588.

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8.4.7 Platforms: rail services

Passenger platforms should be built on a straight section of track so that the gap between platform and rail carriage is minimized. If they have to be on a curve, it is recommended that the smallest radius of curvature should be **600 metres**, and that if possible at least part of the platform should be on a straight section of track. Inevitably there is sometimes a balance to be made between locating a station on a straight section of track and locating it where it is most easily accessible, while economic and engineering factors also have to be taken into consideration. Where a station is on a curve, announcements should be made (as on London Underground) to alert passengers to the gap between platform and carriage.

Platform: rail services
